

What is claimed is:

1. An explosive device capable of self-remediation, if the explosive device fails to detonate, said explosive device comprising:
 - a. a shell configured to allow water from the exterior thereof to enter the interior thereof;
 - b. a quantity of explosive material housed within said shell;
 - c. a quantity of microorganisms capable, when mobilized, of bioremediating explosive material in said quantity thereof, said quantity of microorganisms being disposed in such proximity to said quantity of explosive material that if said explosive device fails to detonate as intended, mobilized microorganisms in said quantity thereof deactivate said explosive device by bioremediating said quantity of explosive material housed within said shell; and
 - d. a nutrient disposed in such proximity to said quantity of explosive material that said nutrient provides nourishment to mobilized microorganisms in said quantity thereof.
2. An explosive device as recited in Claim 1, further comprising a carrier dispersed throughout said quantity of explosive material.
3. An explosive device as recited in Claim 2, wherein said carrier is comprised of said nutrient.

4. An explosive device as recited in Claim 1, wherein microorganisms in said quantity thereof comprise a microorganism selected from the group of microorganisms consisting of *Pseudomonas* spp., *Escherichia* spp., *Morganella* spp., *Rhodococcus* spp., *Comamonas* spp., and denitrifying microorganisms.

5. An explosive device as recited in Claim 1, wherein microorganisms in said quantity thereof comprise a microorganism in *Pseudomonas* spp. selected from the group of microorganisms consisting of *aeruginosa*, *fluorescens*, *acidovorans*, *mendocina*, and *cepacia*.

6. An explosive device as recited in Claim 1, wherein microorganisms in said quantity thereof are among a plurality of types of microorganisms disposed in said such proximity to said explosive material, said plurality of types of microorganisms together defining a microorganism consortium.

7. An explosive device as recited in Claim 1, wherein said microorganism consortium corresponds to the microorganism consortium identified at the American Type Culture Collection by ATCC Designation No. 55784.

8. An explosive device as recited in Claim 1, wherein the explosive material is selected from the group of explosive materials consisting of inorganic nitride explosives, organic nitroaromatic explosives, organic nitramine explosives and organic nitric ester explosives.

9. An explosive device as recited in Claim 1, wherein the explosive material is selected from the group of explosive materials consisting of trinitrotoluene, hexanitrostilbene, hexanitroazobenzene, diaminotrinitrobenzene and triaminotrinitrobenzene, cyclotrimethylene trinitramine, cyclotetramethylene tetranitramine, nitroguanidine, 2,4,6-trinitrophenylmethylnitramine, pentaerythritol tetranitrate, ammonium nitride, nitroglycerine and ethylene glycol dinitrate.

10. An explosive device as recited in Claim 1, wherein the microorganisms in said quantity thereof are mobile.

11. An explosive device as recited in Claim 1, wherein microorganisms in said quantity thereof are dehydrated.

12. An explosive device as recited in Claim 1, wherein microorganisms in said quantity thereof are freeze dried.

13. An explosive device as recited in Claim 1, wherein said nutrient comprises a nutrient selected from the group of nutrients consisting of trace elements, carbon, nitrogen, and phosphate.

14. An explosive device as recited in Claim 1, wherein said nutrient comprises a casamino acid.

15. An explosive device as recited in Claim 1, further comprising a shell containing said quantity of explosive material, said shell being enabling of water flow from the exterior of said shell into contact said quantity of explosive material.

16. An explosive device capable of self-remediation, if the explosive device fails to detonate, said explosive device comprising:

- a. a shell configured to allow water from the exterior thereof to enter the interior thereof;
- b. a quantity of explosive material housed within said shell;
- c. a nutrient intermixed throughout said quantity of explosive material;
- d. a quantity of microorganisms capable, when mobilized, of receiving nourishment from said nutrient and of bioremediating explosive material in said quantity thereof, said quantity of microorganisms being so intermixed throughout said quantity of explosive material that if said explosive device fails to detonate as intended, mobilized microorganisms in said quantity thereof deactivate said explosive device by bioremediating said quantity of explosive material housed within said shell.

17. An explosive device as recited in Claim 16, further comprising a carrier dispersed throughout said quantity of explosive material.

18. An explosive device as recited in Claim 17, wherein said carrier is comprised of said nutrient.

19. An explosive device as recited in Claim 16, wherein said nutrient comprises a nutrient selected from the group of nutrients consisting of trace elements, carbon, nitrogen, and phosphate.

20. An explosive device as recited in Claim 16, wherein said nutrient comprises a casamino acid.

21. An explosive device as recited in Claim 16, wherein microorganisms in said quantity thereof comprise a microorganism selected from the group of microorganisms consisting of *Pseudomonas* spp., *Escherichia* spp., *Morganella* spp., *Rhodococcus* spp., *Comamonas* spp., and denitrifying microorganisms.

22. An explosive device as recited in Claim 16, wherein microorganisms in said quantity thereof comprise a microorganism in *Pseudomonas* spp. selected from the group of microorganisms consisting of *aeruginosa*, *fluorescens*, *acidovorans*, *mendocina*, and *cepacia*.

23. An explosive device as recited in Claim 16, wherein microorganisms in said quantity thereof are among a plurality of types of microorganisms intermixed throughout said quantity of explosive material, said plurality of types of microorganisms together defining a microorganism consortium.

24. An explosive device as recited in Claim 16, wherein said microorganism consortium corresponds to the microorganism consortium identified at the American Type Culture Collection by ATCC Designation No. 55784.

25. An explosive device as recited in Claim 16, wherein the explosive material is selected from the group of explosive materials consisting of inorganic nitride explosives, organic nitroaromatic explosives, organic nitramine explosives, and organic nitric ester explosives.

26. An explosive device as recited in Claim 16, wherein said explosive material is selected from the group of explosive materials consisting of trinitrotoluene, hexanitrostilbene, hexanitroazobenzene, diaminotrinitrobenzene, triaminotrinitrobenzene, cyclotrimethylene trinitramine, cyclotetramethylene tetranitramine, nitroguanidine, 2,4,6-trinitrophenylmethylnitramine, pentaerythritol tetranitrate, ammonium nitride, nitroglycerine, and ethylene glycol dinitrate.

27. An explosive device as recited in Claim 16, wherein microorganisms in said quantity thereof are mobile.

28. An explosive device as recited in Claim 16, wherein microorganisms in said quantity thereof are dehydrated.

29. An explosive device as recited in Claim 16, wherein microorganisms in said quantity thereof are freeze dried.

30. An explosive device as recited in Claim 16, further comprising a shell containing said quantity of explosive material, said shell being enabling of water flow from the exterior thereof into contact with said quantity of explosive material.

31. An explosive device as recited in Claim 30, wherein said shell is water permeable.

32. An explosive device as recited in Claim 30, wherein said shell has an open end.

33. An explosive device as recited in Claim 30, wherein a hole is formed in said shell communicating from said exterior of said shell to the interior thereof.

34. An explosive device as recited in Claim 33, wherein said hole formed in said shell comprises an access opening for detonation wires.

35. An explosive device capable of self-remediation, if the explosive device fails to detonate, said explosive device comprising:

- a. an elongated shell having an exterior and a hollow interior, said shell being configured to allow water from said exterior thereof to enter said interior thereof;
- b. a quantity of explosive material housed within said shell;
- c. a plurality of carrier pellets intermixed throughout said quantity of explosive material;
- d. a quantity of microorganisms capable, when mobilized, of bioremediating explosive material in said quantity thereof, said quantity of microorganisms being disposed within said plurality of carrier pellets; and
- e. a nutrient disposed within said plurality of carrier pellets and being capable of providing nourishment to microorganisms in said quantity thereof.

36. An explosive device as recited in Claim 35, wherein:

- a. microorganisms in said quantity thereof comprise *Pseudomonas* spp.;
- b. the explosive material comprises pentaerythriol tetranitrite;
- c. said carrier pellets are comprised of foam cellulose; and
- d. said nutrient comprises a casamino acid.

37. An explosive device as recited in Claim 35, wherein said nutrient comprises a nutrient selected from the group of nutrients consisting of starch, flour, bran, milk, milk sugar, and minimal medium glycerol.

38. An explosive device as recited in Claim 35, wherein said nutrient comprises a starch.

39. An explosive device as recited in Claim 35, wherein said carrier pellets are comprised of said nutrient.